AD	)				
	_	 		 	

GRANT NUMBER DAMD17-96-1-6071

TITLE: Racial and Ethnic Differences in Breast Cancer Risk Factors

PRINCIPAL INVESTIGATION: Esther M. John, Ph.D.

CONTRACTING ORGANIZATION: Northern California Cancer Center Union City, California 94587-6500

REPORT DATE: July 1998

TYPE OF REPORT: Annual

PREPARED FOR: Commander

U.S. Army Medical Research and Materiel Command Fort Detrick, Frederick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for public release;

distribution unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.

## REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Warden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

		-	
1. AGENCY USE ONLY (Leave blan	k) 2. REPORT DATE July 1998	3. REPORT TYPE AND	DATES COVERED 97 - 30 Jun 98)
4. TITLE AND SUBTITLE	Cd1, 1990	Annual (1 bul	5. FUNDING NUMBERS
Racial and Ethnic Dif	ferences in Breast Ca	ncer Risk	5. FORDING NUMBERS
Factors			DAMD17-96-1-6071
6. AUTHOR(S)			
Esther M. John, Ph.D.			
7. PERFORMING ORGANIZATION P Northern California Ca			8. PERFORMING ORGANIZATION
Union City, California			REPORT NUMBER
differ city, carriothic	3 94307-0300		
•			
9. SPONSORING/MONITORING AG	ENCY NAME(S) AND ADDRESS(E	S)	10. SPONSORING/MONITORING
Commander			AGENCY REPORT NUMBER
U.S. Army Medical Reso Fort Detrick, Frederic		mmand	
Fort Detrick, Frederic	SK, MD 21/02-5012		
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION / AVAILABILIT	Y STATEMENT		12b. DISTRIBUTION CODE
Approved for public re	elease: distribution	unlimited	
•	,		
13. ABSTRACT (Maximum 200			
Data collection for a p	opulation-based case-co	ntrol study of breast	cancer conducted in the
San Francisco Bay Ar	ea has been on-going si	nce July 1996. Case	s include African-
1995 and 1999 Contr	omen aged 35-79 years	and diagnosed with	breast cancer between
activity sunlight expo	ois are identified through	random-digit dialing	J. Information on physical
factors is collected by	sure, dietary intake of vita	amin D and phytoest	rogens, and other risk
anthronometry and sk	r in-person interview. The in pigmentation using a 0	hrome visit also incl	udes measurements of
control interviews have	e been completed. Data	from this study will b	ite, 337 case and 383
collected in two on-go	ing case-control studies	n African-American	Latina, and white women
that use the same me	thodology and questionn	aire. The combined	data for an estimated
1340 cases and 1600	controls will allow us to	examine the risk fact	or profile among white
(high risk), African-Am	erican (moderate risk), a	and Latina (low risk)	women This study will
make an important co	ntribution to the sparse e	pidemiologic literatu	re on breast cancer risk
factors in African-Ame	rican and Latina women.	,	The second serious flow
14 SUBJECT TERMS			
14. SUBJECT TERMS Breast (	Cancer		15. NUMBER OF PAGES
			88
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE		CATION 20. LIMITATION OF ABSTRAC
Unclassified	Unclassified	OF ABSTRACT Unclassified	Inlimited

### FOREWORD

Opinions, interpretations, conclusions and recommendations are
those of the author and are not necessarily endorsed by the U.S.
Army.
Where copyrighted material is quoted, permission has been
obtained to use such material.
Where material from documents designated for limited
distribution is quoted, permission has been obtained to use the
material.
Citations of commercial organizations and trade names in
this report do not constitute an official Department of Army
endorsement or approval of the products or services of these
organizations.
In conducting research using animals, the investigator(s)
adhered to the "Guide for the Care and Use of Laboratory
Animals," prepared by the Committee on Care and use of Laboratory
Animals of the Institute of Laboratory Resources, national
Research Council (NIH Publication No. 86-23, Revised 1985).
$\ell$ 1 For the protection of human subjects, the investigator(s)
addered to policies of applicable Federal Law 45 CFR 46.
In conducting research utilizing recombinant DNA technology,
the investigator(s) adhered to current guidelines promulgated by
the National Institutes of Health.
In the conduct of research utilizing recombinant DNA, the
investigator(s) adhered to the NIH Guidelines for Research
Involving Recombinant DNA Molecules.
In the conduct of research involving hazardous organisms,
the investigator(s) adhered to the CDC-NIH Guide for Biosafety in
Microbiological and Biomedical Laboratories.

PI - Signature Date

## TABLE OF CONTENTS

	Page
1. INTRODUCTION	5
1.1. Background	5
1.2. Purpose of On-going Research	5
2. BODY	6
2.1. Research Materials and Methods	6
2.1.1. Study Population	6
2.1.2. Data Collection Procedures	6
2.1.3. Data Management	7
2.1.4. Quality Control	7
2.2. Results	7
2.2.1. Completed Field Work	7
2.2.2. Revised Work Scope	8
2.2.3. Completed Interviews vs. Revised Work Scope	8
2.2.4. Reliability Study	9
3. CONCLUSIONS	9
4. LITERATURE CITED	9

#### 1. INTRODUCTION

#### 1.1. Background

Breast cancer incidence rates in the San Francisco Bay Area are among the highest in the world [1]. In 1994, breast cancer affected 125.1 per 100,000 white women, the racial-ethnic group with the highest incidence rate, and as the leading incident cancer in women accounted for 33% of all cancers diagnosed in women [2]. Although incidence rates (per 100,000) are lower in African-Americans (96.3), Latinas (74.3), and Asians (68.0), breast cancer is the leading cancer in these populations as well [2].

The pronounced racial-ethnic differences in breast cancer incidence between Latinas, African-Americans, and white women remain largely unexplained for several reasons: (1) Few analytic studies with an etiologic focus have been conducted in Latina and African-American populations [3-11]; (2) few breast cancer studies included non-white populations that were large enough for separate analysis and racial-ethnic comparisons of risk factors [5,7,8]; and (3) in the few studies that included African-American women only [3,4,6,9-11], the comparison of risk factors with those of other racial-ethnic groups is limited by differences in methodology and data collection instruments used in different studies. It therefore is not known to what extent the differences in incidence rates are attributable to racial/ethnic differences in (1) the magnitude of relative risks associated with known and suspected risk factors, (2) the prevalence of known and suspected risk factors, (3) the magnitude of relative risks and/or prevalence of risk factors yet to be identified, and (4) genetic susceptibility.

#### 1.2. Purpose of On-going Research

The San Francisco Bay Area offers a unique opportunity to conduct etiologic research in a multiracial/ethnic population given the large number of breast cancer cases diagnosed each year, 25% of whom are non-white. The on-going population-based case-control study funded by DOD is collecting interview data for African-American and white breast cancer cases and population controls. It uses the same protocol and data collection instruments as two complementary case-control studies conducted by the Principal Investigators: an on-going case-control study of breast cancer in Latina women (funded by the National Cancer Institute) which will complete data collection in the summer 1999 (PI: Dr. Esther M. John), and a case-control study of breast cancer in Latina, African-American, and white women over age 50 years (funded by the California Breast Cancer Research Program) which completed data collection in the spring of 1998 and is currently conducting data analyses (PI: Dr. Pamela Horn-Ross). The three studies are administered as one single case-control study, and the data from the three studies will be pooled for the DOD-funded analyses described below.

The purpose of the on-going study is to collect interview data on a broad array of known, suspected, and newly hypothesized factors, with the ultimate goal of pooling the data from the three case-control studies. The pooled data will allow us to examine racial/ethnic differences in breast cancer risk factors in a large multiracial/ethnic population from a single geographic area. This research will make a significant contribution to the lack of knowledge about the etiology of breast cancer in non-white populations and will help elucidate the reasons for the striking racial/ethnic differences in breast cancer incidence.

#### 2. BODY

#### 2.1. Research Materials and Methods

#### 2.1.1. Study Population

<u>Cases</u> include women meeting the following eligibility criteria: (1) newly diagnosed with histologically confirmed, primary invasive breast cancer; (2) no previous history of *in-situ* or invasive breast cancer; (3) African-American or white (based on self-identification), aged 35-49 years at diagnosis, and diagnosed between April 1, 1995 and April 30, 1998; (4) African-American or white (based on self-identification) aged 50-79 years at diagnosis, and diagnosed between April 1, 1995 and June 30, 1995 or between November 1, 1996 and April 30, 1998; (5) alive at the time of contact; (6) residing in Alameda, Contra Costa, San Francisco, San Mateo, or Santa Clara counties, California, at the time of diagnosis.

African-American and white breast cancer cases aged 50 years and over diagnosed between July 1, 1995 and October 31, 1996 are included in the case-control study by Dr. Horn-Ross.

Women with newly diagnosed breast cancer are identified through the two population-based cancer registries operated by the Northern California Cancer Center. Confidential information on newly diagnosed breast cancer cases is obtained from the registries about every 6 weeks. Based on recent registry data, we anticipate that 455 African-American and 4,550 white breast cancer patients will be eligible for the on-going study. All African-American women and a 10% random sample of white women are invited to participate in the interview. After excluding cases who are deceased or have a personal history of breast cancer, interviews are expected to be completed for 570 cases (260 blacks and 310 whites) funded by the DOD.

<u>Controls</u> include a probability sample of women who meet the following criteria: (1) No previous history of breast cancer; (2) alive and between the ages of 35 and 79 years at the time of selection into the study; (3) residing in Alameda, Contra Costa, San Francisco, San Mateo, or Santa Clara counties, California, at the time of selection into the study; (4) African-American or white based on self-identification.

Controls are identified through random-digit-dialing (RDD). A bank of 70,000 random numbers has been established for the three case-control studies. The random numbers are called by four telephone specialists in monthly waves of 2,500 numbers. After completion of each wave, controls are randomly selected into the study from the pool of eligibles. Controls are frequency-matched to cases by race (African-American, white) and five-year age group (35-39, .... 75-79). Equal number of case and control interviews will be completed.

#### 2.1.2. Data collection procedures

Data collection is performed by experienced professional interviewers and involves a brief screening interview administered over the telephone and an in-person interview usually administered at the participant's home. The screening interview inquires about current age, racial/ethnic background, adoption status, Jewish heritage, personal history of breast or ovarian cancer, and history of cancer in first-degree relatives (see Appendix A). The in-home interview involves the administration of the consent form, a structured questionnaire, and the

measurement of weight, height, waist and hip circumference, and skin pigmentation using a Minolta Chromameter. The questionnaire inquires about demographic background, physical activity, sunlight exposure, diet, supplement intake, anthropometry, residential history, occupational history, pregnancy history, menstrual history, hormone use, and medical history (see Appendix B)

The interview and measurements take 2 to 21/2 hours to administer for most participants.

To ensure that we achieve satisfying response rates given the lengthy home interview, we started a compensation program in July 1997 which has been well received. All study participants are offered \$25.00 for their time and effort in completing the home interview.

#### 2.1.3. Data management

Progress in RDD and data collection (e.g., screening, in-person interview, measurements) is monitored through two computerized FOXPRO tracking systems. Data entry of screening and questionnaire data is also performed through FOXPRO data entry screens.

#### 2.1.4. Quality control

Several quality control procedures have been implemented to ensure the collection of high quality data. (1) Each completed questionnaire is edited by the interviewer immediately following the interview. (2) Each edited questionnaire is reviewed by the Program Manager. Missing data items and obvious error and inconsistencies in answers are identified and clarified by re-contacting the study participant. (3) Each interviewer is observed by the Program Manager while conducting an interview in the field. A report on the observation is prepared and discussed with the interviewer. (4) Interviewers meet every two weeks with the Program Manager to discuss progress and quality of the completed work. (5) Interviewers participate in quarterly staff meetings, or more often as needed, to discuss specific issues arising in the field (e.g., refusals, no-shows, home visits, organization of work load, incentives, etc) and to participate in refresher sessions on specific questionnaire items and measurements. (6) Equipment (i.e., scales, chromameters) is periodically calibrated by office staff. (7) A sample of study participants is being re-contacted and questioned about specific sections of the questionnaire (see below on reliability study). (7) Data entry is on-going and is done twice to easily identify data entry errors.

#### 2.2. Results

Data collection for the DOD component of the on-going case-control study has been ongoing since July 1996 and is expected to be completed by the Fall of 1999. Statistical analyses will be conducted upon completion of data collection and data entry.

#### 2.2.1. Completed Field Work

<u>Cases</u>: As of June 16, 1998, 3,774 newly diagnosed breast cancer cases have been reported to the cancer registry who were listed as African-American or white and who have been diagnosed during the ascertainment period of the DOD component described above. The study population includes a 10% random sample of white cases and all African-American cases. To date, 827 cases have identified and selected. Of these, 195 did not meet the eligibility criteria and were therefore excluded from the study population: 37 had a prior diagnosis of breast cancer, 32 cases were deceased at the time of contact, 3 cases did not speak sufficient English

to complete the home interview, and 118 did not identify themselves as African-American or white. As required by the cancer registries, the physicians of potentially eligible patients were contacted before inviting them to participate in the study. Contraindications were given for 10 patients who subsequently were not contacted.

Of the remaining 629 cases eligible for the home interview, 194 are currently pending in the field (35 pending physician approval, 144 pending screening, and 15 pending the home interview). Of the remaining 435 cases, 382 (88%) completed the telephone screening interview and 337 (78%) completed the home interview and measurements (including 178 African-American and 159 white cases).

<u>Controls</u>: To date, 59,200 random telephone numbers have been closed out and screened for eligible population controls for the three on-going studies. From the pool of eligibles, 760 controls (whites and African-Americans aged 35-79) were selected into the DOD study. Of these, 38 did not meet the eligibility criteria and were therefore excluded from the study population: 25 had prior breast cancer, 7 did not self-identify themselves as African-American or white, 4 did not speak sufficient English to complete the home interview, and 2 were deceased at the time of recruitment. Of the remaining 722 eligible controls, 185 are currently pending in the field (171 pending screening, 14 pending the home interview). Of the remaining 537 eligible controls, 464 (87%) completed the screening interview, and 383 (71%) completed the home interview and measurements (including 199 African-Americans and 184 whites).

#### 2.2.2. Revised Work Scope

We recently reviewed our original estimates of case accrual and interview completion rates with our actual field experience and revised the work scope accordingly. Our case accrual rates agree with our original estimates. The number of cases meeting the eligibility criteria (i.e., no history of breast cancer, alive at the time of contact) is slightly lower than originally estimated, as are the response rates. For the 3 studies combined, we had originally estimated to collect interview data for 480 African-American, 540 white, and 630 Latina cases and equal numbers of controls. Based on our actual field experience, we now project to complete home interviews with 380 African-American and 455 white cases and equal numbers of controls, and 505 Latina cases and 760 Latina controls (1.5 controls per case among Latinas only), or a total of 2,935 participants. Of these, 260 African-American and 310 white cases and equal numbers of controls will be completed as part of the DOD-funded study.

#### 2.2.3. Completed Interviews vs. Revised Work Scope

According to the revised work scope for the DOD study, we are 68% done for African-American cases (178 of 260), and 51% done for white cases (159 of 310). With regard to controls, we are 77% done for African-Americans (199 of 260) and 59% done for whites (184 of 310). The remaining interviews will be completed in year 3 and the early part of year 4 of the project.

One of the goals of this project is to combine the data collected from the 3 on-going case-control studies for statistical analysis. Across the 3 studies we have completed home interviews with a total of 873 cases (271 African-Americans, 325 Latinas, and 277 whites) and 1,027 controls (300 African-Americans, 424 Latinas, and 303 whites). We therefore have

completed 65% (1,900 of 2,935) of the projected work load. The remaining data will be collected by the Fall of 1999.

#### 2.2.4. Reliability Study

A reliability study was planned and implemented in year 2. A sample of study participants is being re-contacted and asked a set of questions included in the original questionnaire. The reliability study is focused on the questions contained in the sections on physical activity, sunlight exposure, and occupational history which deal with the major hypotheses of this study.

#### 3. CONCLUSIONS

All components of data collection have been launched and are conducted by an extraordinary professional team of office and field staff that is highly motivated, experienced, and productive. Data collection is progressing according to schedule and will be completed by the Fall of 1999 according to the originally proposed time line.

#### 4. LITERATURE CITED

- 1. Miller BA, Ries LAG, Hankey BF, et al. (eds). Cancer Statistics Review: 1973-1989, National Cancer Institute. NIH Pub. No. 92-2789, 1992.
- 2. Prehn AW, Leung, Davis MM, et al. Cancer incidence in the San Francisco Bay Area, 1988-1994. Union City, CA:Northern California Cancer Center, 1997.
- 3. Palmer JR, Rosenberg L, Rao RS, et al. Oral contraceptive use and breast cancer risk among African-American women. Cancer Causes and Control 1995;6:321-31.
- 4. Palmer JR, Rosenberg L, Harlap S. et al. Adult height and risk of breast cancer among US black women. Am J Epidemiol 1995;141:845-9.
- 5. Brinton LA, Daling JR, Liff JM, et al. Oral contraceptives and breast cancer risk among younger women. J Natl Cancer Inst 1995;87:827-35.
- 6. Mayberry RM. Age-specific patterns of association between breast cancer and risk factors in black women, ages 20 to 39 and 40 to 54. Ann Epidemiol 1994;4:205-13.
- 7. Krieger N, Wolff MS, Hiatt RA, et al. Breast cancer and serum organochlorines: a prospoective study among white, black, and Asian women. J Natl Cancer Inst 1994;86:589-99.
- 8. Mayberry RM, Stoddard-Wright C. Breast cancer risk factors among black women and white women: Similarities and differences. Am J Epidemiol 1992;136:1445-56.
- 9. Amos CI, Goldstein AM, Harris EL. Familiality of breast cancer and socioeconomic status in blacks. Cancer Res 1991;51:1793-97.

- 10. Schatzkin A, Palmer JR, Rosenberg L, et al. Risk factors for breast cancer in black women. J Natl Cancer Inst 1987;78:213-17.
- 11. Austin H, Cole P, Wynder E. Breast cancer in black American women. Int J Cancer 1979;24:541-44.

# APPENDIX A CASE SCREENING INTERVIEW

### CASE SCREENING INTERVIEW

SCREENING INTERVIEW
Date Screener Completed Study ID
Hello, my name is, I'm Calling from the Northern California Cancer Center. May I speak to (NAME OF CASE WOMAN)?
IF CASE WOMAN ANSWERS THE PHONE:
We recently sent you an invitation to participate in a project on women's health. Have you received our invitation?
IF SHE HAS RECEIVED THE LETTER:
As you may recall, the letter said we would be calling to ask you a few questions and to answer any questions you might have. We have several ongoing breast cancer projects.
IF SHE HAS NOT RECEIVED OR NOT READ THE LETTER:

Our center has several projects to increase our knowledge about women's health. We are looking for ways to prevent breast cancer. We are interviewing women in the San Francisco Bay Area who have had breast cancer, as well as women who have not.

To determine which project you may be eligible for, I would like to ask you a few questions. This should take only 5 minutes.

Before we get started, I want to remind you that your participation is voluntary, and there are no consequences if you decide not to participate. At any time you may decide not to participate in the project, or choose not to answer certain questions. The information you provide will be kept confidential. Before we begin, do you have any questions?

ANSWER ANY QUESTIONS.

May I begin with the first question? Yes No

G:\screener.doc

Let m	e start with the first ques	etion:
Q1.	How old were you on yo	our last birthday?
Q2.	_	categories best describes your racial/ethnic DICES, RECORD UP TO TWO)
	Hispanic or Latina African-American or Blac White OTHER(specify) INTERVIEWER: DO NOT READ, F	1
	AFRICAN AMERICAN OR BLANATIVE AMERICAN	
Q3.	Were you adopted?	
	YES NO DK	1 (GO TO Q3A.) 2 (GO TO Q4.) 9 (GO TO Q4.)
	Q3A. Do you know any	thing about your biological family?
	YES NO	1 (GO TO Q4.) 2 (GO TO Q6.)
Q4.	Were any of your four gi	randparents of Jewish heritage?
	YES NO DK	1 2 (GO TO Q6.) 9 (GO TO Q6.)
	<u>IF YE</u>	<u>s</u> :
	Q5.	How many of your grandparents wereof Jewish heritage?

Q6.	Have you (ever) had brea	ast cancer?
	YES NO DK	1 (GO TO Q7.) 2 (GO TO Q10.) 9 (GO TO Q10.)
Q7.	Was it in one or both bre	easts?
	ONE BOTH 2 (G DK	1 (GO TO Q10.) GO TO Q8.) 9 (GO TO Q10.)
	<b>Q8.</b> How old we cancer was	ere you when your first breast AGE diagnosed?
	<b>Q9.</b> In what mor diagnosed?	nth and year were you first 19 MONTH YEAR
	RST DIAGNOSED BEFORE RVIEW. CONTACT OFFIC	APRIL 1995, COMPLETE SCREENER, BUT DON'T SCHEDULE E IMMEDIATELY.
Q10.	Have you ever had ovaria	an cancer?
	YES NO DK 9	1 2
Q11.	Did you have any type of	f cancer diagnosed before you were 20?
	YES NO DK 9	1 2
IE AD	OODTED AND DOESN'T V	NOW ADOLT BIOLOGICAL FAMILY

IF ADOPTED, AND DOESN'T KNOW ABOUT BIOLOGICAL FAMILY,

GO TO Q15. AND ASK ABOUT DAUGHTERS, THEN GO TO Q19. AND ASK ABOUT SONS.

#### OTHERWISE CONTINUE.

Now I would like to ask you about whether certain of your blood relatives, living or deceased, have had breast cancer, ovarian cancer, or any type of childhood cancer.

			IF YES: Q13. What kind of cancer did she have?
			Q14. How old was she when she was first diagnosed with this cancer?
Q12. Has your mother ever had breast cancer, ovarian cancer, or any type of childhood cancer diagnosed before the age of 20?	YES NO DK	1 <b>→</b> 2 9	BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)
How about any of your sisters?	YES NO DK NO SIST	1 <b>→</b> 2 9 8	SISTER #1 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)
			SISTER #2 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)
			SISTER #3 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)
ASK ALL  Q15. Have any of your daughters ever had breast cancer, ovarian cancer, or any type of childhood cancer before the age of 20?	YES NO DK NO DAUG	1→ 2 9 8	DAUGHTER #1 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)
			DAUGHTER #2 BREAST 1 AGE: OVARIAN 2 AGE: OTHER 8 AGE: (SPECIFY)

			IF YES: Q17. What kind of cancer did he have? Q18. How old was he when he was findingnosed with this cancer?
Q16. Has your <u>father</u> ever had breast cancer, <u>or</u> any type of childhood cancer diagnosed before the age of 20 ?	YES NO DK	1 <b>→</b> 2 9	BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)
How about any of your <u>brothers</u> ?	YES NO DK NO BROTH	1→ 2 9 8	BROTHER #1 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)
			BROTHER #2 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)
			BROTHER #3 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)
ASK ALL  Q19. Have any of your sons had breast cancer, or any type of childhood cancer diagnosed before age of 20?	YES NO DK NO SONS the	1→ 2 9 8	SON #1 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)
			SON #2 BREAST 1 AGE: OTHER 8 AGE: (SPECIFY)

# IF PARTICIPANT REPORTS OTHER CANCERS AND/OR OTHER RELATIVES WITH CANCER, R

TYPE OF RELATIVE	TYPE OF CANCER	AGE AT DIAGNOSIS
1		
2		
3		
4.		

#### **INTERVIEW SET-UP**

# ARRANGE AN IN-HOME INTERVIEW FOR PARTICIPANTS WHO CONSIDERINGEMISELVES: AFRICAN-AMERICAN WHITE WITH A SELECTION NUMBER OF 0 (ZERO)

These are all the questions I have for you today. I would like to thank you very much for answering these questions. Now I would like to invite you to participate in one of our studies which will involve an interview with you in person. We would like to do this in your home at a time which is convenient for you. The interview may take about 2 hours, depending on how much you have to say. We will compensa you \$25.00 for your time and effort. The questionnaire will cover lifestyle factors such as exercise, nutrition, work history, and other activities.

How about? (SUGGEST AN AVAILABLE TIME) Is this a good time for you?	
Let me confirm your address. Do you still live at (CONFIRM ADDRESS)?	
NEW ADDRESS:	
Is there any apartment number?	
Could you please give me directions to your home?	
If you can not make our appointment, would you please call the office at (510) 429-2527. If you prefer, you may call collect between 8:30 a.m. and 5:00 p.m. at (510) 429-2500.	
Thank you again for your time and interest in this study. I will be taking some measurements and it would be very helpful if you would wear light clothing with short sleeves. I am looking forward to meeting you on (CONFIRM APPOINTMED DATE)	N

# CLOSE THE SCREENING INTERVIEW WITH PARTICIPANTS WHO CONSIDER WHITE THE SELVES: WITH A SELECTION NUMBER OF 1-9 ASIAN OR OTHER

These are all the questions I have for you today. I would like to thank you very much for answering these questions. If you should prove to be eligible for one of our studies, we will contact you again soon. Thanks again for your help.

APPENDIX B

QUESTIONNAIRE

PARTICIPANT	וח.		

#### **BAY AREA WOMEN'S HEALTH STUDY**

REFERENCE YEAR 19		
F PARTICIPANT IS LATINA, ASK:	. 1	
Do you prefer to be interviewed in English or	Spanish?	
QUESTIONNAIRE PREFERRED:	ENGLISH SPANISH NO PREFERENCE	1 2 3
IF NO PREFERENCE: IF PARTICIPANT ID IF PARTICIPANT ID	ENDS IN 0,2,4,6 or 8 USE ENG ENDS IN 1,3,5,7 OR 9 USE SP	
QUESTIONNAIRE USED:	ENGLISH SPANISH	1 2
NTERVIEWER:		
DATE OF INTERVIEW:	MO DAY YEAR	]
	Anthro. Measurement	Y N
	Skin Measurement	Y N
	Money Order #	The state of the s
GIVE PARTICIPANT A COPY OF THE CONSENT FOR THROUGH IT WITH HER.	M IN APPROPRIATE LANGUAG	E(S) AND GO
SET-UP FOOD MODELS WHILE PARTICIPANT READ	S AND SIGNS CONSENT FORM	1.
STARTING TIME OF INTERVIEW	АМ	1
HR N	AIN PM	2

#### SECTION A. DEMOGRAPHIC AND CULTURAL BACKGROUND

Thank you again for participating in this important women's health study. In the first section of the interview, I would like to ask for some background information about you and your family.

Let m	e start with your age.		
A1.\	How old were you on your	last birthday?	AGE
A2.	What is your date of birth?	MO	DAY YEAR
АЗ.	What is the highest grade of	or level of school that you completed?  DID NOT ATTEND SCHOOL	98
		GRADE (1-11)	
		HIGH SCHOOL GRADUATE OR GED VOCATIONAL OR TECHNICAL TRAINI SOME COLLEGE OR UNIVERSITY GRADUATED FROM COLLEGE (4-YEA POST GRADUATE DK	14

<b>A4.</b>	(SHOW CARD A, READ CHOICE 1 2 3 4	Mexican or Mexican-American Central American South American African-American Offician-American African-American Offician-American Offician-American	
	8 9	OTHER (SPECIFY)	
A5.	In what country were you born?	· · · · · · · · · · · · · · · · · · ·	
(FROI	RD PARTICIPANT'S ADOPTION S W SCREENING INTERVIEW)		YES 1 NO 2 DK 9
		PTIVE PARENTS AND GRANDPAREN BIOLOGICAL PARENTS AND GRAND	
A6.	In what country was your moth	er born?	
A7.	Your father?		
A8.	Your mother's mother?		
A9.	Your mother's father?	· · · · · · · · · · · · · · · · · · ·	
A10.	Your father's mother?		
A11.	Your father's father?		
		RICAN-AMERICAN, GO TO SECTION	

**ASK A12 - A17 OF LATINA PARTICIPANTS ONLY** 

·	Spanish Both Spanish and English English OTHER (SPECIFY) DK	1 3 5 8 9
SHOW CARD B FOR QUESTION  A13. What languages do you	NS A13 - A17 speak now? (SHOW CARD B, READ CHOI	ICES)
	Spanish only More Spanish than English Spanish and English about equally More English than Spanish English only  DK	1 GO TO B1. 2 3 4 5 GO TO B1.
A14. What languages do you (SHOW CARD B, READ	usually speak with your spouse or partner? CHOICES)  Spanish only More Spanish than English Spanish and English about equally More English than Spanish English only  N/A DK	1 2 3 4 5 8

A12. What was the first language you learned to speak? (READ CHOICES)

		YES NO DK	1 2 GO TO A17. 9 GO TO A17.
	IF YES:		
		What languages do you usually speak with your children? SHOW CARD B, READ CHOICES)	
		Spanish only More Spanish than English Spanish and English about equally More English than Spanish English only	1 2 3 4 5
		DK	9
A17.		nguages do you usually speak with your friends? CARD B, READ CHOICES)	
		Spanish only More Spanish than English Spanish and English about equally More English than Spanish English only	1 2 3 4 5
		DK	9

A15. Do you have any children living in the United States?

#### **SECTION B. PHYSICAL ACTIVITIES**

The next questions are about your physical activities and exercise habits. First I will ask you about walking and bicycling to school and work. If your walking or bicycling patterns changed, please answer the following questions separately for each period.

B1. When you were in school, did you walk to and from school at least 20 minutes a day for at least 4 months out of the year?

YES 1 NO 2 GO TO B2. DK 9 GO TO B2.

		WALK TO SCHOOL	WALK TO SCHOOL	WALK TO SCHOOL	
		WALK TO SCHOOL	WALK TO SCHOOL	WALK TO SCHOOL	
a.	How old were you when you started walking to school at least 20 minutes a day?	AGE	AGE	AGE	
b.	How old were you when you stopped walking to school at least 20 minutes a day?	AGE	AGE	AGE	
c.	How many days a week did you walk to school?	DAYS PER WEEK	DAYS PER WEEK	DAYS PER WEEK	
d.	On the days you walked to school, how many minutes a day in total did you spend walking to and from school?	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3  DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3  DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3  DK 9	
e.	For how many months each year did you walk to school?	MONTHS PER YEAR	MONTHS PER YEAR	MONTHS PER YEAR	
PR	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU WALKED TO SCHOOL AT LEAST 20 MINUTES A DAY FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				

B2.	Did you ride a bicycle to and from school at least 20 minutes a day for at least 4	4
	months out of the year?	

YES 1 NO 2 GO TO B3. DK 9 GO TO B3.

		BICYCLE TO SCHOOL	BICYCLE TO SCHOOL	
a.	How old were you when you started bicycling to school at least 20 minutes a day?	AGE	AGE	
b.	How old were you when you stopped bicycling to school at least 20 minutes a day?	AGE	AGE	
c.	How many days a week did you bicycle to school?	DAYS PER WEEK	DAYS PER WEEK	
d.	On the days you bicycled to school, how many minutes a day in total did you spend bicycling to and from school?	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3  DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3  DK 9	
e.	For how many months each year did you bicycle to school?	MONTHS PER YEAR	MONTHS PER YEAR	
PR	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU RODE A BICYCLE TO SCHOOL AT LEAST 20 MINUTES A DAY FOR AT LEAST 4 MONTHS OUT OF THE YEAR?			

B3. Did you ever walk to work at least 20 minutes a day for at least 4 months out of the year?

YES 1 NO 2 GO TO B4. DK 9 GO TO B4.

		WALK TO WORK	WALK TO WORK
a.	How old were you when you started walking to work at least 20 minutes a day?	AGE	AGE
b.	How old were you when you stopped walking to work at least 20 minutes a day?	AGE	AGE
c.	How many days a week did you walk to work?	DAYS PER WEEK	DAYS PER WEEK
d.	On the days you walked to work, how many minutes a day in total did you spend walking to and from work?	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3  DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3  DK 9
e.	For how many months each year did you walk to work?	MONTHS PER YEAR	MONTHS PER YEAR
PROBE: ARE THERE ANY OTHER TIMES WHEN YOU WALKED TO WORK AT LEAST 20 MINUTES A DAY FOR AT LEAST 4 MONTHS OUT OF THE YEAR?			

B4. Did you ever ride a <u>bicycle to work</u> at least 20 minutes a day for at least 4 months out of the year?

YES 1 NO 2 GO TO B5. DK 9 GO TO B5.

		BICYCLE TO WORK	BICYCLE TO WORK
<b>a.</b>	How old were you when you started bicycling to work at least 20 minutes a day?	AGE	AGE
b.	How old were you when you stopped bicycling to work at least 20 minutes a day?	AGE	AGE
c.	How many days a week did you bicycle to work?	DAYS PER WEEK	DAYS PER WEEK
d.	On the days you bicycled to work, how many minutes a day in total did you spend bicycling to and from work?	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3  DK 9	Less than 1/2 hr 1 1/2 hr to 1 hr 2 more than 1 hr 3  DK 9
е.	For how many months each year did you bicycle to work?	MONTHS PER YEAR	MONTHS PER YEAR
PROBE: ARE THERE ANY OTHER TIMES WHEN YOU RODE A BICYCLE TO WORK AT LEAST 20 MINUTES A DAY FOR AT LEAST 4 MONTHS OUT OF THE YEAR?			

B5. Now, think about farm work, yardwork, and other <u>strenuous</u> chores you did <u>outdoors</u> when you were less than 16 years old. (SHOW CARD C) Such chores include bailing hay, picking fruit, digging, mowing the lawn, chopping wood, shoveling snow, carrying water from the river, washing clothes with a washboard, grinding corn, etc. Also, think about other strenuous chores outdoors not shown on this card.

When you were <u>less than 16 years old</u>, did you do any <u>strenuous chores outdoors</u> at least 2 hours a week for at least 4 months out of the year?

YES 1 NO 2 GO TO B6. DK 9 GO TO B6.

		STRENUOUS OUTDOOR CHORES BEFORE AGE 16	STRENUOUS OUTDOOR CHORES BEFORE AGE 16
a.	How old were you when you started doing strenuous chores outdoors for at least 2 hours a week?	AGE	AGE
b.	How old were you when you stopped doing strenuous chores outdoors for at least 2 hours a week?	AGE	AGE
c.	On average, about how many hours a week did you do strenuous chores outdoors? (SHOW CARD D, READ CHOICES)	2-3 hours a week 1 4-5 hours 2 6-7 hours 3 8 or more hours 4  DK 9	2-3 hours a week 1 4-5 hours 2 6-7 hours 3 8 or more hours 4 DK 9
d.	For how many months each year did you do strenuous chores outdoors?	MONTHS PER YEAR	MONTHS PER YEAR
PROBE: ARE THERE ANY OTHER TIMES WHEN YOU DID STRENUOUS CHORES OUTDOORS AT LEAST 2 HOURS A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?			

B6. Now, think about farm work, yardwork, and other strenuous chores you did <u>outdoors</u> since you were 16 years or older. (SHOW CARD E)

Think only about strenuous chores you did for yourself or your family and were <u>not paid</u> for.

Since you were 16 years old, did you do any strenuous chores outdoors at least 2 hours a week for at least 4 months out of the year?

YES 1 NO 2 GO TO B7. DK 9 GO TO B7.

•*	and the second of the second	STRENUOUS OUTDOOR CHORES SINCE AGE 16	STRENUOUS OUTDOOR CHORES SINCE AGE 16
a.	How old were you when you started doing strenuous chores outdoors for at least 2 hours a week?	AGE	AGE
b.	How old were you when you stopped doing strenuous chores for at least 2 hours a week?	AGE	AGE
c.	On average, about how many hours a week did you do strenuous chores outdoors? (SHOW CARD F, READ CHOICES)	2-5 hours a week 1 6-10 hours 2 11-15 hours 3 16-20 hours 4 21 or more hours 5  DK 9	2-5 hours a week 1 6-10 hours 2 11-15 hours 3 16-20 hours 4 21 or more hours 5  DK 9
d.	For how many months each year did you do strenuous chores outdoors?	MONTHS PER YEAR	MONTHS PER YEAR
PROB	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU DID STRENUOUS CHORES OUTDOORS AT LEAST 2 HOURS A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?		

B7. Now, think about <u>strenuous household</u> chores you did when you were less than 16 years old. (SHOW CARD G) Such chores include scrubbing floors, sweeping, vacuuming, washing windows, etc. Also, think about other strenuous household chores not shown on this card.

When you were <u>less than 16 years old</u>, did you do <u>strenuous household chores</u> at least 2 hours a week for at least 4 months out of the year?

YES 1 NO 2 GO TO B8. DK 9 GO TO B8.

		STRENUOUS HOUSEHOLD CHORES BEFORE AGE 16	STRENUOUS HOUSEHOLD CHORES BEFORE AGE 16		
a.	How old were you when you started doing strenuous household chores for at least 2 hours a week?	AGE			
b.	How old were you when you stopped doing strenuous household chores for at least 2 hours a week?	AGE	AGE		
c.	On average, about how many hours <u>a week</u> did you do strenuous household chores? (SHOW CARD H, READ CHOICES)	2-3 hours a week 1 4-5 hours 2 6-7 hours 3 8 or more hours 4 DK 9	2-3 hours a week 1 4-5 hours 2 6-7 hours 3 8 or more hours 4 DK 9		
d.	For how many months each year did you do strenuous household chores?	MONTHS PER YEAR	MONTHS PER YEAR		
PROI	PROBE:  ARE THERE ANY OTHER TIMES WHEN YOU DID STRENUOUS HOUSEHOLD CHORES AT LEAST 2 HOURS A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				

B8. Now, think about <u>strenuous household chores</u> you did since you were 16 years or older. (SHOW CARD I) Think only about strenuous household chores you did for yourself or your family and were <u>not paid</u> for.

Since you were 16 years old, did you do any <u>strenuous</u> household chores at least 2 hours a week for at least 4 months out of the year?

YES 1 NO 2 GO TO B9. DK 9 GO TO B9.

		STRENUOUS HOUSEHOLD CHORES SINCE AGE 16	STRENUOUS HOUSEHOLD CHORES SINCE AGE 16		
a.	How old were you when started doing strenuous household chores for at least 2 hours a week?	AGE	AGE		
b.	How old were you when you stopped doing strenuous household chores for at least 2 hours a week?	AGE	AGE		
c.	On average, about how many hours a week did you do strenuous household chores? (SHOW CARD J, READ CHOICES)	2-5 hours a week 1 6-10 hours 2 11-15 hours 3 16-20 hours 4 21 or more hours 5 DK 9	2-5 hours a week 1 6-10 hours 2 11-15 hours 3 16-20 hours 4 21 or more hours 5 DK 9		
d.	For how many months each year did you do strenuous household chores?	MONTHS PER YEAR	MONTHS PER YEAR		
PRO	PROBE: ARE THERE ANY OTHER TIMES WHEN YOU DID STRENUOUS HOUSEHOLD CHORES AT LEAST 2 HOURS A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				

B9. Now, I will ask you about your exercise habits before 19\_\_(1 + REFERENCE YEAR).

Please tell me about exercise and sports you did at least 1 hour a week for at least 4 months a year. Think about exercise and sports you did as a child, teenager, and an adult.

(SHOW CARD K) This card gives some examples of <u>strenuous</u> activities, like swimming laps, aerobics, calisthenics, gymnastics, dance, ballet, running, jogging, cycling on hills, tennis, basketball, racquetball, or working on exercise equipment.

Examples of <u>moderate</u> activities are brisk walking, hiking, cycling on level streets, golf, volleyball, softball, or bowling.

Also think about other exercise and sports not shown on this card, but do not include PE or gym class.

Before 19\_ (1 + REFERENCE YEAR) did you participate in any exercise or sports at least 1 hour a week for at least 4 months out of the year?

YES 1 NO 2 GO TO C1. DK 9 GO TO C1.

IF YES: ASK a. AND RECORD TYPE OF ACTIVITY

ASK b. - f. FOR EACH ACTIVITY.

ASK a. - f. FOR EACH EPISODE OF PHYSICAL ACTIVITY.

		1ST ACTIVITY	2ND ACTIVITY	3RD ACTIVITY
a.	What (kind of exercise or sport / other kind of exercise or sport) did you do at least 1 hour a week for at least 4 months out of the year?			
b.	How old were you when you started (ACTIVITY)?	AGE	AGE	AGE
C.	How old were you when you stopped (ACTIVITY)?	AGE	AGE	AGE
d.	For how many months each year did you (ACTIVITY)?	MONTHS PER YEAR	MONTHS PER YEAR	MONTHS PER YEAR
e.	On average, about how many hours a week did you (ACTIVITY)?	HOURS MIN PER WEEK	HOURS MIN PER WEEK	HOURS MIN PER WEEK
f.	Did you do this activity mostly indoors, mostly outdoors, or both indoors and outdoors?	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9

## ASK a. - f. FOR EACH EPISODE OF PHYSICAL ACTIVITY.

		4TH ACTIVITY	5TH ACTIVITY	6TH ACTIVITY
a.	What other kind of exercise or sport did you do at least 1 hour a week for at least 4 months out of the year?			
b.	How old were you when you started (ACTIVITY)?	AGE	AGE	AGE
C.	How old were you when you stopped (ACTIVITY)?	AGE	AGE	AGE
d.	For how many months each year did you (ACTIVITY)?	MONTHS PER YEAR	MONTHS PER YEAR	MONTHS PER YEAR
e.	On average, about how many hours a week did you (ACTIVITY)?	HOURS MIN PER WEEK	HOURS MIN PER WEEK	HOURS MIN PER WEEK
f.	Did you do this activity mostly indoors, mostly outdoors, or both indoors and outdoors?	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9
PROBE: ARE THERE ANY OTHER ACTIVITIES YOU DID AT LEAST 1 HOUR A WEEK FOR AT LEAST 4 MONTHS OUT OF THE YEAR?				

ASK a. - f. FOR EACH EPISODE OF PHYSICAL ACTIVITY.

		7TH ACTIVITY	8TH ACTIVITY	9TH ACTIVITY
a.	In what other kind of exercise or sport did you do at least 1 hour a week for at least 4 months out of the year?			
<b>b.</b>	How old were you when you started (ACTIVITY)?	AGE	AGE	AGE
c.	How old were you when you stopped (ACTIVITY)?	AGE	AGE	AGE
d.	For how many months each year did you (ACTIVITY)?	MONTHS PER YEAR	MONTHS PER YEAR	MONTHS PER YEAR
e.	On average, about how many hours a week did you (ACTIVITY)?	HOURS MIN PER WEEK	HOURS MIN PER WEEK	HOURS MIN PER WEEK
f.	Did you do this activity mostly indoors, mostly outdoors, or both indoors and outdoors?	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9	MOSTLY INDOORS 1 MOSTLY OUTDOORS 2 BOTH 3 DK 9
PRO		OTHER ACTIVITIES YOS OUT OF THE YEAR?	OU DID AT LEAST 1 HO	UR A WEEK FOR AT
	CONTINUATION	I PAGE USED	YES 1 NO 2	
			Г	7

NUMBER OF CONTINUATION PAGES USED

### SECTION C. SUN EXPOSURE

Now I have some questions about being outdoors.

C1.	Think about when you were (AGE).	On an average day in the summertime, about how many hours did you spend outdoors? (SHOW CARD L, READ CHOICES)						
	10-15 years old	less than 1 hour a day 1-2 hours 3-4 hours 5-6 hours 7 or more hours	1 2 3 4 5					
		DK .	9					
	25-30 years old	less than 1 hour a day 1-2 hours 3-4 hours 5-6 hours 7 or more hours	1 2 3 4 5					
		DK	9					
IF AC	SE 55 OR YOUNGER, GO TO CZ	<u>.</u> 2.						
	50-55 years old	less than 1 hour a day 1-2 hours 3-4 hours 5-6 hours 7 or more hours	1 2 3 4 5					
		DK	9					

C2.	In the past 3 months, did you spend less time	YES	1
	outdoors than usual because of any medical	NO	2
	treatment or illness?	DK	9

C3.		e 19 <b>(1+REFERENCE YEAR)</b> , when you were ovoid or protect yourself from the sun <u>most of the</u>			e day, did
		staying in the shade	YES NO		1 2
		wearing a big hat	YES NO		1 2
		wearing long pants	YES NO		1 2
		wearing long sleeves	YES NO		1 2
		N/A: PARTICIPANT DID NOT GO OUTDOOF	RS		8
Set of		TO ALL OF THE ABOVE: GO TO C7.			
	IF YES	S TO ANY OF THE ABOVE:			
	C4.	How old were you when you started protecting yourself from the sun by? (REPEAT YES RESPONSES AT C3)			
	C5.	Do you still protect yourself from the sun by? (REPEAT YES RESPONSES AT C3)		YES 1 NO 2	GO TO C7
•		IF NO:  C6. How old were you when you stopped protecting yourself from the sun by?  (REPEAT YES RESPONSES AT C3)			

C7.		will ask you about sunscree became available in the 197	•	om the s	sun. These
٠		19(1+REFERENCE YEAF t yourself from the sun? (Sh			lotions to
			Never Sometimes About half the time Most of the time Always	1 2 3 4 5	GO TO C10. GO TO C10. GO TO C10.
			DK	9	GO TO C10.
	IF MO	ST OF THE TIME OR ALWAY	YS:		
	C8.	How old were you when yo sunscreen lotions?	u started using		
	C9.	For how many years did you lotions?	u use sunscreen		
C10.		had to be in the hot sun for tion, how would your skin recess)			
			Get a severe sunburn with blistering		1
			Get a moderate to severe sunburn without blistering		2
			Get a mild sunburn		3
			Get no sunburn		4
			OTHER (SPECIFY)		8
			DK		9

C11.	· ·	ng periods of time <u>without protectior</u> SHOW CARD O, READ CHOICES)	, how would
٠		Get a deep tan	1
		Get a moderate tan	2
		Get a light tan	3
		Get no tan	4
		OTHER (SPECIFY)	
			8
		DK	9
C12.	What is your natural eye color? (	SHOW CARD P, READ CHOICES)	
		Blue	1
	• • •	Grey	2
		Green	3
		Hazel	4
		Brown or black	5
		OTHER (SPECIFY)	
			8
		DK	9
C13.	When you were 20 years old, where READ CHOICES)	nat was your natural hair color? (SH	OW CARD Q
		Blonde	1
		Red or auburn	2
		Light brown	3
		Medium or dark brown	4
		Black	5
		OTHER (SPECIFY)	
			8
		DK	9
•			

#### MEASUREMENT OF SKIN PIGMENTATION

Now I would like to take some measurements of your skin. I will use this instrument which will take a photograph of your skin to measure the skin pigmentation. Let me first set up the instrument, and then I will measure the skin on your upper right arm and on your forehead.

#### SET UP AND CALIBRATE EQUIPMENT.

APPLY TOWELETTE AND <u>LIGHTLY</u> WIPE RIGHT INNER UPPER ARM (HALF WAY BETWEEN THE ELBOW AND SHOULDER) AND THE CENTRAL FOREHEAD (1 INCH ABOVE THE EYES).

MEASURE SKIN TWICE ON RIGHT INNER UPPER ARM (1/2 INCH APART).

MEASURE SKIN TWICE ON CENTRAL FOREHEAD (1/2 INCH APART).

ATTACH CHROMA METER PRINTOUT BELOW AND RECORD MEASUREMENTS. (DO NOT TAPE OVER MEASUREMENT NUMBERS)

	ME	ASUREMENT	#1	MEASUREMENT #2				
	Υ	x	У	Υ	x	у		
INNER ARM								
FORE- HEAD								

ATTACH CHROMA METER PRINTOUT HERE	
•	

#### SECTION D. DIET HISTORY

The next section of the interview concerns your diet. First, I will ask you how often you usually ate beans, vegetables, and fruits in 19\_\_ (REFERENCE YEAR). Please tell me the number of times a day, week, month, or year, whichever is easiest for you.

D1.	In 19_ (REFERENCE YEAR), how often did you usually eat beans, such as pinto, garbanzo, kidney, refried beans or black-eyed peas? Please do not include green or string beans.	
	times per DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9	
D2.	How often did you usually eat vegetables? Please do not include salad or potatoes.	
UZ.		
	times per DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9	
D3.	How often did you usually eat any type of fruit, including canned, fresh, or frozen? Please do not include fruit juices.	
	times per DAY 1	
	WEEK 2	
	MONTH 3	
	YEAR 4	
	DK 9	)

Now I have a list of specific foods. Please tell me how often you usually ate each one in 19\_(REFERENCE YEAR). Again, please tell me the number of times a day, week, month, or year, whichever is easiest for you. Think about what you ate at home and in restaurants, include meals and snacks. Our list probably includes a number of foods you didn't eat. If you didn't eat a food, please tell me that.

For some of the foods, I will ask you <u>how much</u> you usually ate. To help you estimate how much you ate, we have different kinds of models. **SET UP MODELS.** 

SHOW MEAT MODELS. For example, you can tell me you usually ate this amount of meat, or more, or less. SHOW WOOD CUBES. Think of these wood cubes as different size servings for foods such as stew and vegetables. You can show me which size serving you usually ate. Do you have any questions?

FOOD ITEM		D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in				D5.  IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]?			
		19_(REFERENCE YEAR)? PORTION SIZE			ON SIZE	SUBSTITUTED			
	D	w	М	Υ	GUIDE	SIZE	GUIDE	SIZE	
First I will ask you about MEATS A include those you made at home, t	ND MA	AIN DISI t, and a	HES yo	u ate in ' staurants	19 (REI	ERENCE \	(EAR). Pie	ease	
hamburgers, cheeseburgers, or turkey burgers					model				
burritos made with meat or chicken					number				
tacos, tostados, enchiladas <i>or</i> <i>empanadas</i> made with meat or chicken					number				
beef or pork in mixed dishes, such as stir-fry, fajitas, stew, or pot pie, or albondigas					READ: Please include the beef or pork portion only.				
professional gus					wood cubes				
beef or pork prepared other ways, such as steaks, roasts, ribs, barbeque, pork chops, or					READ: Please include the beef or pork portion only.				
roast beef sandwiches					model				

FOOD ITEM	(eat/d	often die rink) D/BEVEF REFERE	RAGE) i	n	D5. IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]?			
	19_(	NEFENE	NCE TE	An):	PORTIC	ON SIZE	SUBSTITUTED	
	D	w·	M	Υ	GUIDE	SIZE	GUIDE	SIZE
ham hocks, salt pork, pigs feet, pigs knuckles, including as					READ: Pl portion o	ease inclu nly.	de the me	at
seasoning or combined with other foods					wood cubes			
fried chicken or chicken nuggets (at home or in restaurants)					pieces			
chicken or turkey in mixed dishes, such as stir-fry, fajitas,						ease inclu		cken or
stew, gumbo, or pot pie, <i>mole</i> or arroz con pollo					wood cubes			
chicken or turkey prepared other ways, such as baked, grilled, or					READ: Please include the chicken or turkey portion only.			
roasted, or chicken or turkey sandwiches					model			
liver or liverwurst					model			
hot dogs					number			
bologna, salami, ham, or other lunch meats; do not include roast beef, turkey or chicken					slices			
bacon or sausage, or chorizo					number			
Now I would like to ask you about	several	types o	of fish.					
tuna including fresh, canned, tuna salad or tuna casserole					wood cubes			
white fish, such as flounder, halibut, snapper, bass, cod or sole, including fish sticks					model			
dark fish, such as salmon, mackerel, catfish, trout, herring or sardines					model			
pizza					slices			

FOOD ITEM	(eat/d	rink) D/ <b>BEVE</b> I	d you u RAGE) ii NCE YE	n .	D5.  IF ONCE A WEEK OR MORE (OR IF SHADED): How much did you usually (eat/drink) [each time]?			
					PORTIC	ON SIZE	SUBSTITUTED	
	D	w	M	Υ	GUIDE	SIZE	GUIDE	SIZE
spaghetti, lasagna, ravioli or other pasta with tomato sauce					wood cubes			
noodles or pasta <u>without</u> tomato sauce, such as Fettucine Alfredo, cup-of-soup or pasta salad					wood cubes			
mixed dishes made with cheese, such as macaroni and cheese, cheese enchiladas, or quesadillas, chilaquiles, or pupusas					wood cubes			
Now I will ask you about FRUITS y frozen, and from salad bars, and from	ou ate	in 19 guas fre	(REF	ERENCE	YEAR). P	ease inclu	ıde fresh, d	canned,
apples or applesauce					number			
bananas or plantains					number			
oranges, tangerines, or grapefruit					number			
pears					number			
prunes					wood cubes			
cantaloupe, including from salad bars					quarters			
peaches, apricots, or nectarines (fresh, in season)					number			
peaches, apricots, or nectarines (canned, frozen, or dried)					number			
watermelon (in season)					wood cubes			
strawberries or other berries (in season)					wood cubes			

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19 (REFERENCE YEAR)?				D5.  IF ONCE A WEEK OR MORE (OR II SHADED): How much did you usually (eat/drink) [each time]?							
	10(				PORTIC	ON SIZE	SUBSTI	TUTED				
	D	w	M	Υ	GUIDE	SIZE	GUIDE	SIZE				
Next I am going to ask you about vegetables in mixed dishes.	Next I am going to ask you about VEGETABLES you ate in 19 (REFERENCE YEAR). Please include vegetables in mixed dishes.											
First, I would like to ask you about	severa	l differe	nt type	s of bea	ns and bea	an soups.	USE BEAN	I ВООК				
green beans, string beans, or green peas					wood cubes							
canned chili <u>with</u> beans <i>American-style</i> or chili <u>with</u> beans in restaurants			·		bowls							
frijoles de la olla					bowls							
pinto beans or refried beans					BEAN PO	ORTION O	NLY					
made from pinto beans, including in burritos or tostados					wood cubes			i				
garbanzo beans, chickpeas, or ceci beans					wood cubes							
lentils, split peas or lentil soup or split peas soup					bowls							
other common types of beans, that is, kidney, lima, black, red, great northern, or small white beans, or black-eyed peas, pork'n beans, or baked beans (SHOW ALL 4 PAGES)					wood cubes							
other types of beans, including in soups; anasazi, broad, cannelli, chana dal, cowpeas, cranberry, fava, mung, navy, pink, pinquito, soybeans, 16- bean soup (SHOW LIST)					wood cubes							
IF OTHER BEANS WERE EATEN, A D6. Of these other types of bea		ich type	e did yo	ou eat mo	ost often?	(RECORD	CODE:	vo)				

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19_(REFERENCE YEAR)?			SHADED	: How m at/drink) [	OR MORE (OR IF uch did you each time]?		
	D	W	M	Υ	GUIDE	SIZE	GUIDE	SIZE
alfalfa sprouts including on sandwiches and in salads (SHOW PHOTO IN BEAN BOOK)	-				wood cubes			
regular bean sprouts (SHOW PHOTO IN BEAN BOOK)					wood cubes			
tofu					wood cubes			
meat substitutes made from soy, including veggie burgers	*	9-1-X 1			model		-	
soy sauce					spoons			
miso soup					bowls			
soups with tomatoes or carrots, such as tomato soup, minestrone or vegetable soup, or caldo de pollo/res; do not include bean soups					bowls			
tomatoes, including fresh and stewed tomatoes, and salsa					number			
ketchup or taco sauce					spoons			
carrots, including in mixed vegetables, stew, or salads					wood cubes			
corn, including on-the-cob, canned, or frozen			:		wood cubes			
squash which is yellow inside, such as winter squash, acorn or butternut squash					wood cubes			
squash which is white or pale green inside, such as summer squash or zucchini or chayote					wood cubes			
green or red bell peppers, either raw or cooked, or chile rellenos					number			

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19(REFERENCE YEAR)?			SHADED usually (e	): How m	uch did you each time]		
	D	w	М	Υ	GUIDE	SIZE	GUIDE	SIZE
other peppers, including chiles, jalapeños and hot red peppers (dried or fresh)					spoons		·	
avocado or guacamole					wood cubes			
broccoli			,		wood cubes			
cauliflower or brussel sprouts		. Was track	-		wood cubes			
beets or turnips					wood cubes			
cooked spinach, mustard greens, turnip greens, collards, kale or chard					wood cubes		"	,
cole slaw or cabbage, or curtido					wood cubes			
onions					spoons			
garlic, including fresh, baked, garlic powder or garlic salt					S,M,L			
lettuce					bowls			
salad dressing or mayonnaise, including on sandwiches					spoons			
IF SALAD DRESSING/MAYONNAISE WAS EATEN, ASK:  D7. How often did you eat low-fat or non-fat salad dressing or mayonnaise (READ CHOICES)?  never or rarely 1 sometimes 2 often or always 3 DK 9								
sweet potatoes, yams or pumpkin					wood cubes			
fried potatoes, including french fries and hash browns					wood cubes			

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19_(REFERENCE YEAR)?			D5.  IF ONCE A WEEK OR MORE (OR II SHADED): How much did you usually (eat/drink) [each time]?  PORTION SIZE SUBSTITUTE			?	
	D	W	M	Υ	GUIDE	SIZE	GUIDE	SIZE
potatoes prepared other ways, such as baked, boiled, mashed or potato salad		•		,	wood cubes		·	·
rice or mixed dishes made with rice, such as fried rice, jambalaya or Spanish or Mexican rice					wood	RTION ON	LY	
					cubes			
Next I will ask you about different	types	of BREA	DS you	ate in 1		RENCE YE	AR).	T
whole grain bread, such as whole wheat or rye, alone or as sandwiches					slices	·		
white bread, including sourdough, French or Italian bread, alone or as sandwiches					slices			
flour tortillas					number			
corn tortillas, cornbread, corn muffins or cornbread stuffing					number			
bagels, English muffins or hamburger or hot dog buns					number			
biscuits or muffins					number			
butter on bread, potatoes or vegetables (not margarine)					pats			
margarine					spoons			
IF MARGARINE WAS EATEN, ASK:  D8. What type of margarine did you usually eat?  CODE:  CODE:								
Next are CEREALS and some brea YEAR).	kfast fo	oods. P	lease c	ontinue t	o think abo	out 19	_ (REFEREN	ICE
fiber or bran cereals like raisin bran, granola, or shredded wheat					bowls			
any other kind of cold cereals					bowls			

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19(REFERENCE YEAR)?			n	D5.  IF ONCE A WEEK OR MORE (CONTROL OF CONTROL OF CONT			u
				PORTIC	ON SIZE	SUBSTITUTED		
	D	w	М	Υ	GUIDE	SIZE	GUIDE	SIZE
IF COLD CEREAL WAS EATEN, A D9. What types of cold cereal of the cold		eat mos	t often	?	·		CODE:	
cooked cereals like oatmeal, cream of wheat, or grits					bowls			
IF COLD OR HOT CEREAL WAS EASK: milk on (hot or cold) cereal READ OPTIO		1 son	vays / or metimes ver / rare	3	S,M,L			
pancakes, waffles, or french toast, including frozen					number			;
Next we have SNACKS.								
snacks, like potato chips, corn chips, popcorn, pork skins or nuts					wood cubes			
peanut butter					spoons			
Next are some SWEETS and dess	erts.							
doughnuts, churros or pastries, or pan dulce					number			
chocolate candy or candy bars					S,M,L			
cake or cookies					S,M,L			
Next we have a few DAIRY PROD	DUCTS.					** ************************************	*·	
ice cream					wood cubes			
IF ICE CREAM WAS EATEN, ASK D10. How often did you eat low		non-fat i	ice crea	m (REA	D CHOICES	never o	or rarely mes or always	1 2 3 9

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19 (REFERENCE YEAR)?				D5. IF ONCE A WEEK OR MORE (OR II SHADED): How much did you usually (eat/drink) [each time]?			
	19(	REFERE	NCE YE	AH)?	PORTIC	N SIZE	SUBSTITUTED	
	D	W	М	Υ	GUIDE	SIZE	GUIDE	SIZE
yogurt or frozen yogurt					wood cubes			
IF YOGURT OR FROZEN YOGURT WAS EATEN, ASK:  D11. How often did you eat low-fat or non-fat yogurt or frozen yogurt (READ CHOICES)?  never or rarely sometimes  often or always  DK								1 2 3 9
eggs, including omelettes	,	-			number			
cheese or cheese spreads					slices			
sour cream <i>or crema</i> , including in Mexican dishes, on baked potatoes, and in dips					spoons			i.
Now I have a list of BEVERAGES.								
milk including chocolate milk and licuados (NOT ON CEREAL)					glasses			
IF MILK WAS DRUNK, ASK: D12. How often did you drink low-fat or skim milk (READ CHOICES)?  never or rarely sometimes often or always DK								1 2 3 9
soy milk					glasses			
instant breakfast drinks or diet shakes, such as Carnation or Slim Fast					number			
coffee, hot or iced					cups			
IF COFFEE WAS DRUNK, ASK: D13. Did you usually drink regular or decaffeinated coffee?  REGULAR  DECAF  BOTH EQUALLY  DK							1 2 3 9	
herbal tea, hot or iced					cups			
regular tea, hot or iced					cups			

FOOD ITEM	D4. How often did you usually (eat/drink) (FOOD/BEVERAGE) in 19_(REFERENCE YEAR)?			SHADED usually (e	): How m	OR MORE (OR IF nuch did you [each time]?		
	D	W	M	Υ	GUIDE	SIZE	GUIDE	SIZE
add sugar to foods such as coffee, tea or cereal; do not include sugar substitutes					S,M,L			
orange juice or grapefruit juice					glasses			-
tomato juice or V8 juice					glasses			
drinks with added vitamin C such as Ocean Spray juice cocktail, Kool-Aid, or Hi-C					glasses			
coke or other soda or sweetened bottled drinks, such as Snapple fruit drinks; do not include diet soda, diet drinks, or teas					glasses			
beer					cans/ bottles			,
wine, wine coolers or champagne					wine glasses			
cocktails, mixed drinks or shots					drinks/ shots			

D14. In 19\_ (REFERENCE YEAR), what kind of fat or oil did you use most often for cooking, frying, or to season your food? (SHOW CARD R, READ CHOICES) (RECORD UP TO TWO)

margarine	7
low-fat margarine	2
butter	3
olive or canola oil	4
corn, vegetable, or other oil	5
Pam or other spray	6
Crisco shortening	7
lard, fatback, or bacon fat	8
DOESN'T USE ADDED FAT/OIL	6
OTHER (SPECIFY)	
	88
DK	99

That completes all of the diet questions for which we will be using the models. I only have a few more questions about diet.

We've just been talking about what you ate in 19\_ (REFERENCE YEAR). Now think back 10 years to 19\_ (REFERENCE YEAR - 10). I would like to know how your diet was different back then.

FOOD	D15. Did you eat more, less, or the same amount of (FOOD) in 19 (REFERENCE YEAR - 10) as you did in 19 (REFERENCE YEAR)? I.E., CONSUMPTION 10 YEARS AGO WAS
fruit	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
beans (I.E., PINTO, GARBANZO, KIDNEY, REFRIED BEANS, AND BLACK- EYED PEAS; NOT GREEN OR STRING BEANS)	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
vegetables	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
whole grain breads	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
fiber or bran cereals (I.E., RAISIN BRAN, GRANOLA, OR SHREDDED WHEAT)	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
beef or pork	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK
chicken	1 MORE 2 LESS 3 SAME 8 DIDN'T EAT 9 DK

For several types of foods I would like to know how your diet has changed over your lifetime. I will ask you about milk, eggs and fish.

1	e between (AGE AND AGE), hov sually drink milk? S)	D20. How about eggs?	D21. How about fish?	
	OOD ITEM FOR A GIVEN AGE I TO THE NEXT AGE.			
AGE 10-15	every day several times a week once a week several times a month once a month or less never or rarely	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
rijeste i jednosti sa	DK	4	9	9
AGE 25-30	every day several times a week once a week several times a month once a month or less never or rarely  DK	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
IF AGE 55 OR YOUN	GER, GO TO E1.			
AGE 50-55	every day several times a week once a week several times a month once a month or less never or rarely  DK	1 2 3 4 5 6 9	1 2 3 4 5 6	1 2 3 4 5 6

### SECTION E. VITAMINS

Now I would like to ask you about vitamins.

E1. Before 19\_\_\_\_ (1 + REFERENCE YEAR), did you ever take any of the following at least once a week for six months or longer: vitamins, minerals, garlic pills, or fiber supplements?

YES 1 NO 2 GO TO E25. DK 9 GO TO E25.

### IF YES:

First, I will ask you about multiple vitamin pills.  E2. Have you ever taken multiple vitamins, such as One-a-day, Centrum, or Theragram at least once a week for six months or longer?	YES 1 NO 2 GO TO E7. DK 9 GO TO E7.
E3. How old were you when you first took multiple vitamins?	AGE
E4. For how many years in total did you take multiple vitamins?	YEARS
E5. Did you take multiple vitamins, such as One-a-day, Centrum, or Theragram, for at least six months in 19 (REFERENCE YEAR)?	YES 1 NO 2 GO TO E7. DK 9 GO TO E7.
E6. In 19 (REFERENCE YEAR), how many pills did you usually take each week?	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9 MAX=1/DAY

E7. Did you take an antioxidant formula multiple vitamin for at least six months in 19 (REFERENCE YEAR)?  (A SINGLE PILL THAT CONTAINS LARGE AMOUNTS OF BETA-CAROTENE, AND VITAMINS C AND E)	YES 1 NO 2 GO TO E9. DK 9 GO TO E9.
E8. How many pills did you usually take each week?	PILLS PER  DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9 MAX=1/DAY
Next I would like to know about single vitamin supplements.  E9. Have you ever taken Vitamin C at least once a week for six months or longer?	YES 1 NO 2 GO TO E15. DK 9 GO TO E15.
E10. How old were you when you first took Vitamin C regularly?	AGE
E11. For how many years in total did you take Vitamin C?	YEARS
E12. Did you take Vitamin C for at least six months in 19 (REFERENCE YEAR)?	YES 1 NO 2 GO TO E15. DK 9 GO TO E15.
E13. In 19 (REFERENCE YEAR), how many pills did you usually take each week?	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9
E14. In 19 (REFERENCE YEAR), how many milligrams of Vitamin C were in each pill?	mgs

E15. Did you take <b>Vitamin A or beta-carotene</b> for at least six months in 19 (REFERENCE YEAR)?	YES 1 NO 2 GO TO E18. DK 9 GO TO E18.
E16. In 19 (REFERENCE YEAR), how many pills did you usually take each week?	PILLS PER  DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9 MAX=1/DAY
E17. Did the pills contain beta-carotene only, retinol only, or both?	BETA-CAROTENE ONLY 1 RETINOL ONLY 2 BOTH 3 DK 9

E18. Did you take <b>Vitamin E</b> for at least six months in 19 ( <b>REFERENCE YEAR</b> )?	YES 1 NO 2 GO TO E21. DK 9 GO TO E21.
E19. In 19 (REFERENCE YEAR), how many pills did you usually take each week?	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9
E20. How many IUs or international units of Vitamin E were in each pill?	IUs

E21. Did you take <b>Garlic Pills</b> for at least six months in 19	YES 1 NO 2 GO TO E23. DK 9 GO TO E23.
E22. In 19 (REFERENCE YEAR), how many pills did you usually take each week?	DAY 1 WEEK 2 MONTH 3 YEAR 4 DK 9

E23.	Did you take <b>fiber supplements</b> for at least six months in 19 (REFERENCE YEAR)?	YES NO DK	1 2 GO TO E25. 9 GO TO E25.
E24.	In 19 (REFERENCE YEAR), how many pills or teaspoons did you usually take each week?	OR	PILLS TEASPOONS  1 2 3 4 9

E25.	Did y	ou ever take cod liver o	oil before age 20?			
				YES NO DK	1 2 GO TO S 9 GO TO S	
	IF YE	<u>'S:</u>				
	E26.	How often did you ta	ke cod liver oil? (REA	D CHOICES)		
			Once a week or more 1-3 times a month Less than once a mo		1 2 3	
*		and the second of the second o	OTHER (SPECIFY) _		8 9	
	E27.		ns or years in total did		MONTHS YEARS	1 2

#### SECTION F. ANTHROPOMETRY

As we talked about earlier, as part of this study we would like to take measurements of your height, weight, waist, and hips, and I would like to do that at this time. I will take each measurement three times.

IF PARTICIPANT REFUSES ANY OR ALL MEASUREMENTS, INDICATE WHICH ONES WERE REFUSED (CIRCLE ALL THAT APPLY):

HEIGHT	1
WEIGHT	2
WAIST CIRCUMFERENCE	3
HIP CIRCUMFERENCE	 4

IF PARTICIPANT IS BED RIDDEN, WHEELCHAIR BOUND, OR UNSTABLE ON HER FEET, OR > 300 LBS ASK AND RECORD HER CURRENT HEIGHT AND WEIGHT IN THE MARGIN.

SET-UP EQUIPMENT AND TAKE MEASUREMENTS. RECORD BELOW.

egal service and a service and	MEASUREMENT 1	MEASUREMENT 2	MEASUREMENT 3
HEIGHT	смѕ	смѕ	CMS
WEIGHT	KGS KGS	KGS KGS	;
WAIST CIRCUMFERENCE	смѕ	CMS	Смѕ
HIP CIRCUMFERENCE	CMS	смѕ	CMS

#### QUESTIONS TO BE ANSWERED BY THE INTERVIEWER:

WAS THE PARTICIPANT'S POSTURE STOOPED?

YES, A LOT	1
YES, SOME	2
YES, A LITTLE	3
NO	

DID THE PARTICIPANT REMOVE HER SHOES WHEN MEASURING HEIGHT?

YES	1
NO	2
N/A	8

DID THE PARTICIPANT REMOVE HER SHOES WHEN MEASURING WEIGHT?

YES	1
NO	2
N/A	8

DESCRIPTION OF PARTICIPANT'S CLOTHING (CIRCLE ALL THAT APPLY):

	T-SHIRT LIGHTWEIGHT SHIRT OR BLOUSE HEAVY SHIRT OR BLOUSE SWEATER OR SWEATSHIRT	1 2 3 4	
	LIGHTWEIGHT DRESS HEAVY DRESS	5 6	
•	LIGHTWEIGHT PANTS OR SKIRT HEAVY PANTS OR SKIRT	7	
	OR SWEATPANTS JEANS OR DENIM SKIRT OTHER (SPECIFY)	8 9 10	
	N/A: ALL MEASUREMENTS REFUSED	D 88	
WAS THE WAIST MEASUREMENT TAKEN OVER	CLOTHING?		
	YES NO N/A	1 2 8	
HOW WELL COULD YOU IDENTIFY THE PROPER	PLACE TO TAKE THE WAIST MEASUR	REMENT?	
	VERY WELL ADEQUATELY NOT WELL AT ALL N/A	1 2 3 8	
HOW WELL COULD YOU IDENTIFY THE PROPER PLACE TO TAKE THE HIP MEASUREMENT?			
	VERY WELL ADEQUATELY NOT WELL AT ALL N/A	1 2 3 8	

The next set of questions are about your weight and body shape at different times in your life. When answering these questions, please don't include any times when you were pregnant.

F1. Which of these pictures best represents your body shape when you were (about (AGE) / between (AGE AND AGE)) (SHOW CARD T)		F2. About how much did you usually weigh when you were between (AGE) and (AGE)?	F3. How tall were you at that time?
AGE 12	PICTURE #	X	X
AGE 25-30	PICTURE #	POUNDS 1 KGS 2	FEET INCHES OR
			CENTIMETERS
IF AGE 55 OR YOUNGER GO	TO F4.		
AGE 50-55	PICTURE #	POUNDS 1 KGS 2	X
F4. Which of these pictures in 19 (REFERENCE YE			PICTURE #
F5. How much did you weig	h in 19 (REFERE		POUNDS 1 KGS 2

F6.	Between the ages of 25 an what is the most you have include any times when you	ever weighed? Please don't	POUNDS 1 KGS 2	
F7.	How old were you when yo	ou first weighed (POUNDS/KGS)?	AGE	
F8.	Between the ages of 25 and what is the least you have any times when you were it	ever weighed? Please don't include		
\$ · · ·		e de la companya de l	POUNDS 1 KGS 2	
F9.	How old were you when yo	ou last weighed (POUNDS/KGS)?	AGE	
F10.		ou were pregnant, when you gain wor gain it the easiest? (CIRCLE ALL)		oody
		ON THE ARMS AROUND THE CHEST OR SHOULD AROUND THE WAIST OR STOMAG AROUND THE HIPS OR BUTTOCKS ON THE THIGHS EQUALLY ALL OVER	ERS 2 CH 3 S 4	1 2 3 4 5 6
		OTHER (SPECIFY)		]
		HAVEN'T GAINED WEIGHT	8	8

## SECTION G. RESIDENTIAL HISTORY

Now I'd like to ask you about all the places in which you have lived since you were born. I am interested in the cities or towns where you have lived, not the exact address.

	G1. Where did you live first / Where did you live next?				G2. In what year or at what age did you move to (CITY)?	G3. (Was/is) (CITY) a city, suburb, town, or rural area?			
	CITY	STATE	COUNTRY	CODE LATITUDE	YEAR		CIT SUE TO\ RUF ARE	BURE WN RAL	3
1					X	1	2	3	4
2					19 AGE	1	2	3	4
3					19 AGE	1	2	3	4
4					19 AGE	1	2	3	4
5					19 AGE	1	2	3	4
6					19 AGE	1	2	3	4
7					19 AGE	1	2	3	4

-	G1. Where did you live next?			G2. In what year or at what age did you move to (CITY)?		cit sul tov	ITY) y, burb wn,	a ),	
,	CITY	STATE	· COUNTRY	CODE LATITUDE	YEAR	1 2 3 4	CIT SUE TO\ RUF ARE	BUR! WN RAL	В
8					19 AGE	1	2	3	4
9	. e e e				19 AGE	1	2	3	4
10					19 AGE	1	2	3	4
11					19 AGE	1	2	3	4
12					19 AGE	1	2	3	4
13					19 AGE	1	2	3	4
14					19 AGE	1	2	3	4
	CONTINUATION PAGE	USED:	YE			<b></b>			
	NUMBER OF CONTINUATION PAGES USED								

#### SECTION H. OCCUPATIONAL HISTORY

H1. Now I would like to ask about your paid work .

Have you ever had a paid job for 1 year or longer?

YES 1 NO 2 GO TO SECTION J

Please tell me about all the jobs you have held or the types of work you have done for one year or longer. Think about <u>paid</u> full-time or part-time work and when you were self-employed. Also tell me when you were a <u>full-time</u> homemaker.

### ASK QUESTIONS a. - f. FOR EACH JOB HELD OR TYPE OF WORK DONE.

		1ST JOB	2ND JOB
a.	What was the job title or the type of work you did (first / next) for 1 year or longer?		
	(PROBE FOR TYPE OF BUSINESS OR INDUSTRY)		
	IF FULL-TIME HOMEMAKER: ASK	b. AND c. ONLY	
b.	In what year or at what age did you start working as a (JOB TITLE)?	19 AGE	19 AGE
C.	In what year or at what age did you stop working as a (JOB TITLE)?	19 AGE	19 AGE
d.	On average, how many hours a week did you usually work in this job?	HOURS PER WEEK	HOURS PER WEEK
e.	Did you work outdoors in this job?	YES 1 NO 2 <b>GO TO f</b> .	YES 1 NO 2 <b>GO TO f</b> .
	IF YES: On average, how many hours a week did you work outdoors in this job?	HOURS PER WEEK	HOURS PER WEEK
f.	In this job, what was your level of physical activity? (SHOW CARD U, READ CHOICES)	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9
g.	In this job, how many hours a week did you do strenuous activities or hard labor?	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB
h.	For how many months each year did you do strenuous activities or hard labor?	MONTHS PER YEAR	MONTHS PER YEAR

# ASK a. - f. FOR EACH JOB HELD OR TYPE OF WORK DONE.

		3RD JOB	4TH JOB
а.	What was the job title or the type of work you did next for 1 year or longer?		
	(PROBE FOR TYPE OF BUSINESS OR INDUSTRY)		
	IF FULL-TIME HOMEMAKER: ASK	b. AND c. ONLY	
b.	In what year or at what age did you start working as a (JOB TITLE)?	19 AGE	19 AGE
c.	In what year or at what age did you stop working as a (JOB TITLE)?	19 AGE	19 AGE
d.	On average, how many hours a week did you usually work in this job?	HOURS PER WEEK	HOURS PER WEEK
e.	Did you work outdoors in this job?  IF YES: On average, how many hours a	YES 1 NO 2 GO TO f.	YES 1 NO 2 GO TO f.
	week did you work <u>outdoors</u> in this job?	HOURS PER WEEK	HOURS PER WEEK
f.	In this job, what was your level of physical activity? (SHOW CARD U, READ CHOICES)	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9
g.	In this job, how many hours a week did you do strenuous activities or hard labor?	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB
h.	For how many months each year did you do strenuous activities or hard labor?	MONTHS PER YEAR	MONTHS PER YEAR

# ASK a. - f. FOR EACH JOB HELD OR TYPE OF WORK DONE.

		5TH JOB	6TH JOB
а.	What was the job title or the type of work you did next for 1 year or longer?		
	(PROBE FOR TYPE OF BUSINESS OR INDUSTRY)		
	IF <u>FULL-TIME</u> HOMEMAKER: ASK	b. AND c. ONLY	
b.	In what year or at what age did you start working as a (JOB TITLE)?	19 AGE	19 AGE
c.	In what year or at what age did you stop working as a (JOB TITLE)?	19 AGE	19 AGE
d.	On average, how many hours a week did you usually work in this job?	HOURS PER WEEK	HOURS PER WEEK
e.	Did you work outdoors in this job?	YES 1 NO 2 <b>GO TO f</b> .	YES 1 NO 2 <b>GO TO f</b> .
	IF YES: On average, how many hours a week did you work <u>outdoors</u> in this job?	HOURS PER WEEK	HOURS PER WEEK
f.	In this job, what was your level of physical activity? (SHOW CARD U, READ CHOICES)	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9	Mostly sitting 1 Mostly standing or walking 2 Mostly moderate physical activities 3 Mostly strenuous activities or hard labor 4 DK 9
g.	In this job, how many hours a week did you do strenuous activities or hard labor?	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB	HOURS PER WEEK IF '00' HOURS GO TO NEXT JOB
h.	For how many months each year did you do strenuous activities or hard labor?	MONTHS PER YEAR	MONTHS PER YEAR
	CONTINUATION PA	AGE USED YES NO	1 2
	NUMBER OF CONT	INUATION PAGES USED	

### SECTION J. PREGNANCY HISTORY

The next section of the interview is about your pregnancies.

J1. How many times have you been pregnant? Please include all live births, stillbirths, miscarriages, abortions, tubal or ectopic pregnancies.

IF NEVER PREGNANT: RECORD 98

GO TO J14, page 59.

# IF ONE OR MORE PREGNANCIES:

Now I would like to ask you some questions about (each of your pregnancies / your pregnancy).

GO TO J2.

NOTE: MULTIPLE BIRTHS SHOULD BE COUNTED AS ONE PREGNANCY

## ASK J2 - J13 FOR EACH PREGNANCY BEFORE ASKING ABOUT NEXT PREGNANCY.

		1ST PREGNANCY	2ND PREGNANCY	3RD PREGNANCY		
J2.	What was the outcome of your (first / next) pregnancy? (SHOW CARD V, READ CHOICES)					
	Single live birth 2 Multiple live birth 3 Stillbirth 4 Miscarriage 5 Tubal or ectopic pregnancy 6 Induced abortion 7 Currently pregnant 1 OTHER (SPECIFY) 8 DK 9  IF CURRENTLY PREGNANT OR FIRST PREGNANCY: SKIP TO J14					
J3.	How long did this pregnancy last?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9		
J4.	During what month and year (was your baby born / did this pregnancy end)?	MO YR	MO YR	MO YR		
	IF LIVE BIRTH OR STILLBIRTH, GO TO J6.  OTHERWISE, GO TO J2 FOR THE NEXT PREGNANCY.					

•		1ST PREG	2ND PREG	3RD PREG
J6.	Did you breast-feed (this baby / any of these babies)?  IF YES:  J7. Did you breast-feed (this baby / any of these babies for(READ CHOICES)	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12
	less than 2 weeks 1 2 weeks or longer 2	1 GO TO J8 2 GO TO J9	1 GO TO J8 2 GO TO J9	1 GO TO J8 2 GO TO J9
J8.	Which of the following choices best describes the main reason you breast-fed for less than 2 weeks? (SHOW CARD W, READ CHOICES)  Insufficient milk 1 Painful nursing 2 Breast infection or mastitis 3 OTHER (SPECIFY) 8	GO TO J12	GO TO J12	GO TO J12
J9.	How old (was the baby / were the babies) when you started to regularly supplement your breast-feeding with formula, regular milk, or baby food?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J10.	How old (was the baby / were the babies) when you stopped breast-feeding altogether?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J11.	Which of the following choices best describes the main reason you stopped breast-feeding when you did? (SHOW CARD X, READ CHOICES)  Normal weaning 1 Returned or started to work 2 Insufficient milk 3 Painful nursing 4 Breast infection or mastitis 5 OTHER (SPECIFY) 8 DK 9			
J12.	Did you receive any medication to stop milk production?  IF YES:	YES 1 NO 2→ J2 DK 9→ J2	YES 1 NO 2→ J2 DK 9→ J2	YES 1 NO 2→ J2 DK 9→ J2
	J13. Was it in the form of a shot or a pill?	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9

# ASK J2 - J13 FOR EACH PREGNANCY BEFORE ASKING ABOUT NEXT PREGNANCY.

		4TH PREGNANCY	5TH PREGNANCY	6TH PREGNANCY
J2.	What was the outcome of your (first / next) pregnancy? (SHOW CARD Y, READ CHOICES)			
	Single live birth 2 Multiple live birth 3 Stillbirth 4 Miscarriage 5 Tubal or ectopic pregnancy 6 Induced abortion 7 Currently pregnant 1 OTHER (SPECIFY) 8 DK 9  IF CURRENTLY PREGNANT: SKIP TO J14			
J3.	How long did this pregnancy last?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J4.	During what month and year (was your baby born / did this pregnancy end)?	MO YR	MO YR	MO YR
	IF LIVE BIRTH OR STILLBIRTH, GO TO J6. OTHERWISE, GO TO J2 FOR THE NEXT PE	REGNANCY.		

,		4TH PREG	5TH PREG	6TH PREG
J6.	Did you breast-feed (this baby / any of these babies)?  IF YES:	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12
	J7. Did you breast-feed (this baby / any of these babies for(READ CHOICES)	į		
	less than 2 weeks 1 2 weeks or longer 2	1 GO TO J8 2 GO TO J9	1 GO TO J8 2 GO TO J9	1 GO TO J8 2 GO TO J9
J8.	Which of the following choices best describes the main reason you breast-fed for less than 2 weeks? (SHOW CARD Z, READ CHOICES)			
	Insufficient milk 1 Painful nursing 2 Breast infection or mastitis 3 OTHER (SPECIFY) 8 DK 9	GO TO J12	GO TO J12	GO TO J12
J9.	How old (was the baby / were the babies) when you started to regularly supplement your breast-feeding with formula, regular milk, or baby food?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J10.	How old (was the baby / were the babies) when you stopped breast-feeding altogether?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J11.	Which of the following choices best describes the main reason you stopped breast-feeding when you did? (SHOW CARD AA, READ CHOICES)			
	Normal weaning 1 Returned or started to work 2 Insufficient milk 3 Painful nursing 4 Breast infection or mastitis 5 OTHER (SPECIFY) 8 DK 9			
J12.	Did you receive any medication to stop milk production?  IF YES:	YES 1 NO 2 → J2 DK 9 → J2	YES 1 NO 2 → J2 DK 9 → J2	YES 1 NO 2 → J2 DK 9 → J2
	J13. Was it in the form of a shot or a pill?	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9

### 'ASK J2 - J13 FOR EACH PREGNANCY BEFORE ASKING ABOUT NEXT PREGNANCY.

		7TH PREGNANCY	8TH PREGNANCY	9TH PREGNANCY
J2.	What was the outcome of your (first / next) pregnancy? (SHOW CARD BB, READ CHOICES)			
	Single live birth 2 Multiple live birth 3 Stillbirth 4 Miscarriage 5 Tubal or ectopic pregnancy 6 Induced abortion 7 Currently pregnant 1 OTHER (SPECIFY) 8 DK 9  IF CURRENTLY PREGNANT: SKIP TO J14			
J3.	How long did this pregnancy last?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J4.	During what month and year (was your baby born / did this pregnancy end)?	MO YR	MO YR	MO YR
	IF LIVE BIRTH OR STILLBIRTH, GO TO J6.  OTHERWISE, GO TO J2 FOR THE NEXT PREGNANCY.			

			7TH PREG	8TH PREG	9TH PREG
J6.	Did you these b		YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12	YES 1 NO 2 → J12 DK 9 → J12
		you breast-feed (this baby / any hese babies for(READ CHOICES)  less than 2 weeks 1	1 GO TO J8 2 GO TO J9	1 GO TO J8 2 GO TO J9	1 GO TO J8 2 GO TO J9
		2 weeks or longer 2		2 00 10 00	
J8.	describ for less CC, RE Insuffic Painful		GO TO J12	GO TO J12	GO TO J12
		infection or mastitis 3 (SPECIFY) 8 9		·	·
J9.	when y your br	d (was the baby / were the babies) ou started to regularly supplement east-feeding with formula, regular baby food?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J10.		d (was the baby / were the babies) ou stopped breast-feeding ner?	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9	WEEKS 1 MONTHS 2 DK 9
J11.	describ breast-	of the following choices best es the main reason you stopped feeding when you did? CARD DD, READ CHOICES)			
	Returne Insuffic Painful Breast	weaning 1 ed or started to work 2 ient milk 3 nursing 4 infection or mastitis 5 (SPECIFY) 8			
J12.	•	receive any medication to stop oduction?	YES 1 NO 2 → J2 DK 9 → J2	YES 1 NO 2 → J2 DK 9 → J2	YES 1 NO 2 → J2 DK 9 → J2
	J13.	Was it in the form of a shot or a pill?	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9	SHOT 1 PILL 2 DK 9

CON	TINUATIO	N PAGE USED:	YES NO	1 2	
NUM	BER OF CO	ONTINUATION PAGES USED			
J14.	menstrual Did you e	trol pills are taken for many reasons. These include to I periods, to prevent pregnancy, and for other health r ver take birth control pills for any reason? (INCLUDE R BIRTH CONTROL IMPLANTS AND BIRTH CONTROL	easons. 'NORPLANT'		
	, S	tan sa kanada sa kanada kanada kanada kanada sa kanada kanada sa kanada kanada kanada kanada kanada kanada kan	YES NO DK	1 2 GO TO K1 9 GO TO K1	-
	IF YES:				
	J15.	How old were you when you first took birth control	pills?	AG	ìΕ
	J16.	Are you currently taking birth control pills?	YES NO	1 <b>GO TO J18</b> 2	3.
		IF NO:			
		J17. How old were you when you last took birth co	entrol pills?	AG	E
	J18.	In total, for how many months or years have you tak birth control pills? Do not include any months when not take them.	ken you did		
					1 2 9

# SECTION K. MENSTRUAL HISTORY AND HORMONE USE

The	next questions are about your	menstrual periods and use of female hori	mones	<b>3.</b>
K1.	How old were you when you	had your first menstrual period?		AGE
	IF NEVER MENSTRUATED:	RECORD 98 AND GO TO K5.		
K2.	When did you have your last	t menstrual period?		-
				MONTHS AGO
<i>i</i> .	and the second of the second o			YEARS AGO
				AGE
		19		MONTH/YEAR
КЗ.	Which of the following best (SHOW CARD EE, READ CH	describes your menstrual status in 19 IOICES)	_ (REF	ERENCE YEAR)?
		Still having periods	1	
		Still having periods but going through the change of life or menopause	2	
		Periods had stopped but started again because of hormone use	3	
		Completed menopause or change of life, periods stopped by themselves	4	
		Periods stopped because of surgery or other medical treatment	5	
		OTHER (SPECIFY)	•	
		DK	9	

K4.	meno pills,	I have some questions about estrogens or progestins. The pausal symptoms such as hot flashes. These hormones is shots, skin patches, creams, or vaginal suppositories. The gen is Premarin. The most common type of progestin is for the progestin in the progestin is for the progestin in the progestin in the progestin is for the progestin in the progestin in the progestin is the progestin in th	may have le most co	peen in the	form o
		you ever taken estrogens or progestins for any reason? Scontrol pills.	Do not inc	ude	
	Direit	control pins.	YES NO DK	1 2 GO TO 9 GO TO	
	IF YE	<u>s</u> :			-
<i>:</i> .	K5.	Were you still having periods when you first took estrogens or progestins?	YES NO DK	2	го к7. го к7.
		IF NO:			
		K6. When did you have your last menstrual period before beginning hormone use?		AC	GE
			19		ONTH/ EAR
,	K7.	How old were you when you <u>first</u> took estrogens or progestins?		AC	GE
	K8.	Are you currently taking estrogens or progestins?	YES NO	1 <b>GO</b> <sup>2</sup>	TO K10
•		IF NO:	<del> </del>	7	
		K9. How old were you when you <u>last</u> took estrogens or progestins?		AGE	
	K10.	In total, for how many months or years have you taken estrogens or progestins? Do not include any months whyou did not take them.	Y	MONTHS TEARS	1 2 9

(11.	estrog	estrogens and progestins are often taken together, some gen alone. Have you ever taken estrogen alone, that is, we gestin within the same month or cycle?				
	•	' '	YES	1		
			NO	2	GO TO	K14
			DK	9	GO TO	K14
	<u>IF YE</u> K12.	<b>S:</b> How old were you when you first took estrogen <u>alone</u> ?	: '	·	AGE	
	K13	In total, for how many months or years did you take estre alone? Do not include any months when you did not take	•			
	· · · .				ONTHS ARS	1 2 9

(14.	Have	you ever taken Tamoxifen or Nolvadex?	YES NO DK	1 2 GO TO L1. 9 GO TO L1.
	IF YE	<u>\$</u> :		
	K15.	How old were you when you <u>first</u> took Tamoxifen or Nolvadex?		AGE
	K16.	Are you currently taking Tamoxifen or Nolvadex?	YES NO	1 <b>GO TO K18</b> .
		IF NO: K17. How old were you when you <u>last</u> took Tamoxifen or Nolvadex?		AGE
	K18.	In total, for how many months or years have you taken Tamoxifen or Nolvadex? Do not include any months when you did not take it.		MONTHS 1 YEARS 2 DK 9

## SECTION L. MEDICAL HISTORY

L1.		e you ever had a hysterectomy, that is, surger ove your uterus or womb?	ry to	YES NO DK	1 2 GO TO L3. 9 GO TO L3.
	IF Y	<u>ES</u> :			<del></del>
	L2.	How old were you when you had the hyster	rectomy?		AGE
L3.	Have	e you ever had one or both of your ovaries co	mpletely remov	ved?	
		en en var var var en	YES, ONE OV YES, BOTH ON NO DK		1 2 3 GO TO L5. 9 GO TO L5.
	IF YE	<u>ES</u> :			
	L4.	How old were you when you had your (ovar removed?	ry / ovaries)		FIRST OVARY  SECOND OVAR
					1
L5.		e you ever had breast tissue removed by a bio ase such as a cyst or breast lump that was <u>no</u>		breast YES NO DK	1 2 <b>GO TO L7</b> . 9 <b>GO TO L7</b> .
	IF YE	ES:			
	L6.	How old were you when you had this first of	done?		AGE

Now I will ask you about some medical conditions you may have had before 19\_\_\_ (1 + REFERENCE YEAR).

L7. Has a doctor ever told you that you had (CONDITION) ? (SHOW CARD GG)			IF YES: L8. How old were you when the doctor first told you that you had (CONDITION)?
Epilepsy or epileptic seizures	YES NO DK	1 2 9	
Cirrhosis or other liver disease	YES NO DK	1 2 9	
Kidney disease	YES NO DK	1 2 9	
Parathyroid disease	YES NO DK	1 2 9	
Any type of thyroid disease or goiter	YES NO DK	1 2 9	
Cataracts	YES NO DK	1 2 9	
Skin cancer	YES NO DK	1 2 9	

L9.	Have you ever taken Dilantin or any other anti-seizure	YES	1
	medications for more than 6 months before	NO	2
	19 (1 + REFERENCE YEAR)?	DK	9

L10.	. Women receive radiation treatment to the chest for conditions such as tuberculosis, breast problems after childbirth, Hodgkin's disease, and other conditions. Before 19 (1 + REFERENCE YEAR) did you ever receive radiation treatment to the chest for a medical problem? Please do not include radiation treatment for breast cancer or chest x-rays.					medical
			YES	5	1	
			. NO		2	GO TO M1.
			DK		9	GO TO M1.
	IF YES:		<u>.</u>			
	L11.	. How old were you when you <u>first</u> received this treatment?				AGE
	L12. For what disease or condition did you receive this treatment?					
· · ·		an agent of	TUBERCULOSIS		1	
			BREAST PROBLEMS (POSTPAR MASTITIS)	TUM	2	
			HODGKIN'S DISEASE		3	
			OTHER (SPECIFY)		8	1.
		·	DK		9	

#### SECTION M.

The last questions are unrelated to health, but will help us evaluate the scientific methods we used in this study.

M1. Do you have an answering machine or voice mail?

ANSWERING MACHINE		1	
VOICE MAIL		2	<b>GO TO END</b>
вотн		3	
NONE	•	4	<b>GO TO END</b>
DK		9	

#### IF ANSWERING MACHINE:

M2. Would you say that you or other members of your household screen your calls.... (READ CHOICES)

Never or rarely	1
Sometimes	2
Most of the time	3
Always	4
DK	9

#### END:

These are all the questions I have for you. Is there anything else you would like to add or any questions you have for me?

Thank you for your participation in this research study.

Your cooperation, time and effort in this study will help increase the medical community's understanding and knowledge about women's health issues.

Presently there are several other epidemiologic studies being conducted in the Bay Area on breast health. If you are invited to participate, we hope you will be as generous with your time and interest on those research investigations as you have been with us. We (I) encourage you to participate, as your contribution can not be replaced by anyone else's, and the studies all focus on answering different questions.

My supervisor and/or I may contact you in the near future to clarify a question.

Thank you again. (OFFER BROCHURE)

TIME INTERVIEW COMPLETED:			AM	1
	HR	MIN	PM	2

# **INTERVIEWER ASSESSMENT**

1. PARTICIPANT'S COOPERATION WAS	VERY GOOD GOOD FAIR POOR	1 2 3 4
2. THE OVERALL QUALITY OF THIS INTERVIEW IS	HIGH QUALITY GENERALLY RELIABLE QUESTIONABLE UNSATISFACTORY	1 2 3 4

HOW MUCH DIFFICULTY DID THE PARTICIPANT HAVE IN ANSWERING EACH OF THE FOLLOWING SECTIONS?		IF SOME OR A LOT, DESCRIBE
DEMOGRAPHICS AND CULTURAL BACKGROUND	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
PHYSICAL ACTIVITY	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
SUNLIGHT EXPOSURE	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
DIET	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
VITAMINS	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
ANTHROPOMETRY	NONE 1 A LITTLE 2 SOME 3 A LOT 4	
RESIDENTIAL HISTORY	NONE 1 A LITTLE 2 SOME 3 A LOT 4	

OCCUPATIONAL HISTORY	NONE 1 A LITTLE 2 SOME 3 A LOT 4		
PREGNANCY HISTORY	NONE 1 A LITTLE 2 SOME 3 A LOT 4		
MENSTRUAL HX, HORMONE USE & MEDICAL HX	NONE 1 A LITTLE 2 SOME 3 A LOT 4		
3. WERE THERE ANY DISTRACTIONS D	URING THE INTERVIE	W? YES NO	1 2
IF YES: DESCRIBE			
4. WAS A THIRD PERSON PRESENT DU	RING THE INTERVIEW		1
IF YES:		NO	2
5. WHO?	HUSBAND SON OR DAUGHTER OTHER RELATIVE OTHER (SPECIFY)		1 2 3 8
6. HOW MUCH DID THE THIRD P	ERSON CONTRIBUTE	TO THE INFORMAT	– ION?
	NONE A LITTLE SOME A LOT		1 2 3